The EX15 Series was developed to provide a high precision, enclosed shaft encoder for light duty and small applications. The EX15 boasts 1024 line counts in a miniature 1.54" diameter package.

Capable of operating over a temperature range of 0°C to +70°C without degradation of signals, the EX15 Series provides superior, commercial grade performance.

A standard two-year warranty and proven design makes the EX15 a valuable product for OEM applications.

**EX15 Incremental Encoder**

**Mechanical Specifications**
- Diameter: 1.54" Height: 1.45"
- Shaft Size: .25"
- Weight: 3 ounces
- Acceleration: 200,000 rad./sec. Max
- Shaft Load: Axial 5lb. Radial 5lb.
- Torque: Less than 0.5 ounce inch
- Bearings: Sealed ABEC 3

**Electrical Specifications**
- Code: Incremental
- Output Format: dual channel quadrature, min. edge separation 45°
- Output Type EX152/EX153: Square wave TTL & CMOS. 16mA sink. 500 µA source short circuit protected
- Output Type EX156: TTL differential line driver (26LS31) or equivalent should be terminated into a line receiver (26LS32) or equivalent circuit
- Frequency Response: see figure 7
- Rise Time: less than 1.0 µ sec.

**Environmental Specifications**
- Enclosure: Unsealed housing. Unit must be protected from harsh environments.
- Temperature: Operating, 0º to 70º C; Storage, -20º to 105º C

**Termination Specifications**
- Type: See Figures 1 through 6
- Pinout: See pinout section

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- Type: See Figures 1 through 6
- Pinout: See pinout section

**EX15 Incremental Ordering Options** for assistance, call 800.350.2727

Use this diagram, working from left to right to construct your model number (example: EX152-500-G-PH7)

- **OUTPUT FORMAT:**
  - 2 = Quadrature w/ complements
  - 6 = Quadrature w/ Index & complements

- **PULSES PER REVOLUTION (PPR):**
  - 500, 512, 1000, 1024

- **INDEX TYPE**
  - *For Output Format 6 ONLY*
  - U = Ungated
  - G = Gated to A & B

- **OUTPUT TERMINATION**
  - CXX = Round Shielded Cable (XX = length of cable in inches)
  - PH7 = Terminal Board with 7 pin header
  - PH10 = Terminal Board with 10 pin header
These commodities, technology or software if exported from the United States must be in accordance with the Bureau of Industry, and Security, Export Administration regulations. Diversion contrary to U.S law is prohibited.